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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/705,627	11/10/2003	Wen San Chou	14039 B	4788
	7590 09/17/2007 BAXLEY, ESQ.		EXAM	INER
90 JOHN STRE	EET	HAMO, PATRICK		
THIRD FLOOF NEW YORK, N			ART UNIT	PAPER NUMBER
ŕ			3746	
			MAIL DATE	DELIVERY MODE
			09/17/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

			(A)
		Application No.	Applicant(s)
	<b>A 1 1 1</b>	10/705,627	CHOU, WEN SAN
	Office Action Summary	Examiner	Art Unit
		Patrick Hamo	3746
Period fo	The MAILING DATE of this communi or Reply	ication appears on the cover sheet w	ith the correspondence address
WHIC - Exte afte - If NC - Failu Any	HORTENED STATUTORY PERIOD FOR CHEVER IS LONGER, FROM THE Mansions of time may be available under the provisions or SIX (6) MONTHS from the mailing date of this common period for reply is specified above, the maximum staure to reply within the set or extended period for reply reply received by the Office later than three months a ned patent term adjustment. See 37 CFR 1.704(b).	AILING DATE OF THIS COMMUNI- of 37 CFR 1.136(a). In no event, however, may a funication. atutory period will apply and will expire SIX (6) MON will, by statute, cause the application to become Al	CATION. reply be timely filed  NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).
Status			
	Responsive to communication(s) file	d on 12 July 2007	
		2b)⊠ This action is non-final.	
,	Since this application is in condition	<b>/</b> —	ters, prosecution as to the merits is
<b>- /</b>	closed in accordance with the practic		
Disposit	tion of Claims		
4)🖂	Claim(s) 1 is/are pending in the appli	ication.	
• —	4a) Of the above claim(s) is/ar	re withdrawn from consideration.	
5)	Claim(s) is/are allowed.		
6)⊠	Claim(s) <u>1</u> is/are rejected.		
•	Claim(s) is/are objected to.		
8)□	Claim(s) are subject to restric	tion and/or election requirement.	
Applicat	ion Papers		
9)[	The specification is objected to by the	e Examiner.	
10)[	The drawing(s) filed on is/are:	a) accepted or b) objected to	by the Examiner.
	Applicant may not request that any object	ction to the drawing(s) be held in abeyar	nce. See 37 CFR 1.85(a).
	Replacement drawing sheet(s) including	· · · · · · · · · · · · · · · · · · ·	
11)	The oath or declaration is objected to	by the Examiner. Note the attached	d Office Action or form PTO-152.
Priority	under 35 U.S.C. § 119		
,	Acknowledgment is made of a claim	for foreign priority under 35 U.S.C. §	§ 119(a)-(d) or (f).
a)	D All b) Some * c) None of:		
	<u></u>	documents have been received.	
	2. Certified copies of the priority		
		of the priority documents have been	received in this National Stage
. •	application from the Internation See the attached detailed Office action	nal Bureau (PCT Rule 17.2(a)).	ropolyod
•	See the attached detailed Office action	n for a list of the certified copies flot	received.
Attachmer		<b></b>	0 (070 400)
	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (P		Summary (PTO-413) (s)/Mail Date
3) 🔲 Infor	mation Disclosure Statement(s) (PTO/SB/08)	5) Notice of I	Informal Patent Application
	er No(s)/Mail Date	6)  Other:	<del></del> ·

#### **DETAILED ACTION**

This action is in response to amendments filed on July 12, 2007.

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chou, Pat. No. 6,095,758 in view of Luo, Pat. No. 5,411,379

.Chou discloses an air compressor comprising a base 1 including an aperture 1F formed in an upper portion thereof and including an orifice 12 formed in a lower portion thereof, and including an opening 10 formed in a front portion of the base, the front being the side of the base in view in fig. 1, and defined by a peripheral flange 101 and communicating with the orifice and for forming a peripheral shoulder (the portion of the base 1 defined by the flange against which the sleeve 14 is seen to abut in the cross-sectional view of fig. 4) between the orifice and the opening of the base, a sleeve 14 engaged in the opening of the base and retained in the opening of the base with the peripheral shoulder and peripheral flange of the base (fig. 4), an eccentric member 20 including a shaft 21 extending therefrom, and rotatably engaged through the sleeve and rotatably secured to the base with the sleeve, the eccentric member including a pin 24

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extended therefrom and eccentric relative to the shaft, a fastener 26 securing the shaft to the sleeve, a cylinder 17 including a piston rod 30 rotatably coupling to the pin of the eccentric member through link 34, a gear 22 attached to the eccentric member, the gear including a chamber 2A formed therein and defined by a peripheral casing formed by two bars or shoulders extending from the gear (col. 3, II. 4-7) to receive the eccentric member, the gear and the eccentric member being rotated in concert with each other and being rotatable relative to the base about the shaft of the eccentric member, and a motor 15 secured to the base via screw rods 13 and including a pinion 16 provided thereon and engaged with the gear to rotate the gear and eccentric member relative to the base (fig. 4) and to move the piston rod in the cylinder in a reciprocating motion (col. 3, I. 66 – col. 4, I. 3).

Chou does not disclose a bearing engaged in the opening of the base and retained in the opening of the base with the peripheral shoulder and peripheral flange of the base, the shaft of the eccentric member rotatably engaged through the bearing and rotatably secured to the base with the bearing, nor a fastener securing the shaft to the bearing. Instead, as discussed above, Chou discloses a sleeve 14 retained in the opening against the flange and shoulder, the shaft 21 of the eccentric member 20 rotatably engaged through the sleeve, in the position which the present application claims a bearing.

However, it is common in the art to provide a bearing between a rotating shaft and a stationary part such as the base in the present application in order to properly align the shaft and reduce friction associated with its rotation. Luo discloses a motor-

driven pneumatic fan with a plurality of bearings 51 and 71 disposed between a rotating shaft (reference numeral 6 in fig. 2, reference numeral 16 in fig. 3 and the specification) and stationary seats 50 and 70, respectively.

Because both Chou and Luo disclose means of rotatably securing a rotating shaft to a stationary base part, it would have been obvious to substitute the bearing assembly of Luo for the sleeve of Chou in order to achieve the predictable result of aligning the shaft and reducing friction associated with its rotation.

## **Double Patenting**

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 1 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,095,758 in view of Brown et al., Pat. No. 6,296,765.

Claim 1 of Patent No. 6,095,758 discloses most of the limitations of claim 1 in the present application, including a securing seat (corresponding to the base in the present application) including a slot (opening) communicating with a shaft receiving hole (orifice), two opposite planar portions (peripheral flanges), projecting rim (peripheral shoulder), a motor with a main gear (pinion), a weight (eccentric member) with a shaft and connecting rod (pin) extending therefrom, a piston coupled to the pin, a gear attached to the weight, an E-shaped fastening clip, a receiving recess (chamber) in the gear, and retaining blocks (peripheral casing) to hold the weight in place in the gear (col. 4, l. 26 – col. 6, l. 22).

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As discussed above in the rejection under 35 USC 103(a), Patent No. 6,095,758 does not disclose a bearing engaged in the opening of the base and retained in the opening of the base with the peripheral shoulder and peripheral flange of the base, the shaft of the eccentric member rotatably engaged through the bearing and rotatably secured to the base with the bearing, nor a fastener securing the shaft to the bearing. Instead, as discussed above, Chou discloses a sleeve 14 retained in the opening against the flange and shoulder, the shaft 21 of the eccentric member 20 rotatably engaged through the sleeve, in the position which the present application claims a bearing.

However, it is common in the art to provide a bearing between a rotating shaft and a stationary part such as the base in the present application in order to properly align the shaft and reduce friction associated with its rotation. Luo discloses a motor-driven pneumatic fan with a plurality of bearings 51 and 71 disposed between a rotating shaft (reference numeral 6 in fig. 2, reference numeral 16 in fig. 3 and the specification) and stationary seats 50 and 70, respectively.

Because both Chou and Luo disclose means of rotatably securing a rotating shaft to a stationary base part, it would have been obvious to substitute the bearing assembly of Luo for the sleeve of Chou in order to achieve the predictable result of aligning the shaft and reducing friction associated with its rotation.

## Response to Arguments

Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues that the prior cited art failed to teach a compact air compressor comprising a base including an opening formed by a peripheral flange and a peripheral shoulder formed between an orifice and the opening of the base for stably receiving the bearing and for engaging with a shaft of an eccentric member in order to smoothly couple the shaft of the eccentric member to the base and to prevent the shaft of the eccentric member from becoming loose relative to the base and thus to prevent great noise from being generated between the shaft of the eccentric member and the base, and also to prevent a great heat from being generated between the shaft and the base. However, it is noted that the features upon which applicant relies (i.e., the intended use features) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See In re Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Furthermore, in response to applicant's argument that the bearings reduce noise, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See Ex parte Obiaya, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following references teach the use of bearings on motor shafts for the purpose of friction reduction:

Patent Nos. 6,892,431; 6,688,865; 6,688,859; 6,659,060; 6,530,760; 6,490,905; 6,409,507; 6,308,748; 5,775,275; 5,595,251; 5,209,190; 5,152,254; 4,838,114; 4,828,403; 4,236,496; 3,746,475.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick Hamo whose telephone number is 571-272-3492. The examiner can normally be reached on M-F 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Stashick can be reached on 571-272-4561. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Anthony Stashick

Supervisory Patent Examiner

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PH